APPENDIX A

Claim Amended Shown after Response to Office Action Dated November 16, 2001

1. (Amended three times) A method of reducing the growth rate of a tumor, comprising contacting a cell within said tumor with (a) a DNA segment [gene] encoding a functional p53 protein and (b) a DNA damaging agent in a combined amount effective to inhibit the growth of said tumor, wherein functional p53 protein is expressed in the cell.

2. (Amended three times) The method of claim 1, wherein the DNA damaging agent is [said cell is contacted with said gene in combination with] X-ray radiation, UV-irradiation, γ-irradiation, microwaves, adriamycin, 5-fluorouracil, etoposide, camptothecin, actinomycin-D, mitomycin C, or cisplatin.

3. (Amended twice) The method of claim 2, wherein said cell is contacted with the DNA segment [said gene] in combination with cisplatin.

4. (Amended three times) The method of claim 1, wherein the DNA segment is in [said cell is contacted with] a recombinant vector that expresses the [a] functional p53 protein in said cell [in combination with a DNA damaging agent].

5. (Amended four times) The method of claim 4, wherein said p53-expressing recombinant[,] vector is a naked DNA plasmid, [or] a plasmid within a liposome, a retroviral vector, an AAV vector, or a recombinant adenoviral vector.

8. (Amended three times) The method of claim 4, wherein said recombinant vector comprises a p53 expression region, a [the] cytomegalovirus IE promoter and an [the] SV40 early polyadenylation signal.

9. (Amended) The method of claim 6, wherein at least one gene essential for adenovirus replication is deleted from said adenovirus vector [construct] and a [the] p53 expression region is introduced in its place.

10. (Amended) The method of claim 9, wherein [the] E1A and E1B regions of the adenovirus vector are deleted and the p53 expression region is introduced in their place.

11. (Cancelled)

12. (Amended twice) The method of claim 1, wherein said cell is first contacted with the DNA segment [said gene] and is subsequently contacted with said DNA damaging agent.

13. (Amended twice) The method of claim 1, wherein said cell is first contacted with said DNA damaging agent and is subsequently contacted with the DNA segment [said gene].

14. (Amended twice) The method of claim 1, wherein said cell is simultaneously contacted with the DNA segment [said gene] and said DNA damaging agent.

15. (Amended twice) The method of claim 1, wherein said cell is contacted with a first composition comprising the DNA segment [said gene] and a second composition comprising said DNA damaging agent.

17. (Amended twice) The method of claim 1, wherein said cell is contacted with a single composition comprising the DNA segment [said gene] in combination with said DNA damaging agent.

22. (Amended three times) The method of claim 1, wherein said [tumor] cell is a malignant cell.

26. (Amended four times) The method of claim 1, wherein said [tumor] cell is located within an animal at a tumor site.

32. (Amended twice) A composition comprising a) an exogenous DNA segment [a gene] encoding a functional p53 polypeptide and b) [in combination with] a DNA damaging agent.

33. (Amended three times) The composition of claim 32, wherein the DNA damaging agent is [comprising said gene in combination with] adriamycin, 5-fluorouracil, etoposide, camptothecin, actinomycin-D, mitomycin C, or cisplatin.

34. (Amended twice) The composition of claim 33, wherein the DNA damaging agent is [comprising said gene in combination with] cisplatin.

35. (Amended twice) The composition of claim 32, wherein the exogenous DNA segment is in [comprising] a recombinant vector that expresses a functional p53 protein in an animal cell [in combination with a DNA damaging agent].

38. (Cancelled)

39. (Amended) The composition of claim 37, wherein the recombinant vector is [32, comprising] a recombinant adenoviral vector and the DNA damaging agent is [present within a recombinant adenovirus particle in combination with] cisplatin.

45. (Amended) The kit of claim 42, wherein the recombinant vector is an [comprising a pharmaceutical formulation of a recombinant] adenovirus [including a recombinant] vector [that expresses a p53 protein in an animal cell] and the DNA damaging agent is [a pharmaceutical formulation of] cisplatin.

46. (Amended twice) The method of claim 1, wherein the [tumor] cell is contacted with a DNA damaging agent by irradiating the [tumor] cell with X-ray radiation, UV-irradiation, γ-irradiation or microwaves.

47. (Amended) The method of claim 46, wherein the [tumor] cell is contacted with a DNA damaging agent by irradiating the [tumor] cell with X-ray radiation.

48. (Amended) The method of claim 46, wherein the [tumor] cell is contacted with a DNA damaging agent by irradiating the [tumor] cell with UV-irradiation.

49. (Amended) The method of claim 46, wherein the [tumor] cell is contacted with a DNA damaging agent by irradiating the [tumor] cell with γ-irradiation.

50. (Amended) The method of claim 46, wherein the [tumor] cell is contacted with a DNA damaging agent by irradiating the [tumor] cell with microwaves.

51. (Amended twice) The method claim 1, wherein the [tumor] cell is contacted with a pharmaceutical composition comprising the [a] DNA damaging agent [compound].

77. (Amended twice) The method of claim 4, wherein said DNA segment [gene] is administered prior to said DNA damaging agent.

78. (Amended twice) The method of claim 4, wherein said DNA segment [gene] is administered after said DNA damaging agent.

79. (Amended twice) The method of claim 4, wherein said DNA segment [gene] is administered at the same time as said DNA damaging agent.

83. (Amended three times) The method of claim 26, wherein said DNA segment [gene] is delivered to said tumor endoscopically, intravenously, intratracheally, intralesionally, percutaneously or subcutaneously.

86. (Amended twice) The method of claim 13, wherein there is 12 to 24 hours [the period] between administration of the DNA damaging agent and administration of the DNA segment [gene is between 12 and 24 hours].

87. (Amended twice) The method of claim 13, wherein there is 6 to 12 hours [the period] between administration of the DNA damaging agent and administration of the DNA segment [gene is between 6 and 12 hours].

88. (Amended twice) The method of claim 13, wherein there is about 12 hours [the period] between administration of the DNA damaging agent and administration of the DNA segment [gene is about 12 hours].

89. (Amended twice) The method of claim 12, wherein there is 12 to 24 hours [the period] between administration of the DNA segment [gene] and administration of the DNA damaging agent [is between 12 and 24 hours].

90. (Amended three times) The method of claim 12, wherein there is 6 to 12 hours [the period] between administration of the DNA segment [gene] and administration of the DNA damaging agent [is between 6 and 12 hours].

91. (Amended three times) The method of claim 12, wherein there is about 12 hours [the period] between administration of the DNA segment [gene] and administration of the DNA damaging agent [is about 12 hours].

101. (Amended) The method of claim 23 [95], wherein said lung cancer cell is a small cell lung carcinoma cell.

119. (Amended) The method of claim 47, wherein the cell is irradiated with about [x-ray dosage is between] 2000 to [and] 6000 roentgens.

120. (Amended) The method of claim 47, wherein the cell is irradiated with about [x-ray dosage is between] 50 to [and] 200 roentgens.